

DAU Collaborates with Local Organizations to Create Two New Continuous Learning Modules

Javits-Wagner-O'Day (JWOD) Program • Cost as an Independent Variable (CAIV)

KELLY NIEVES

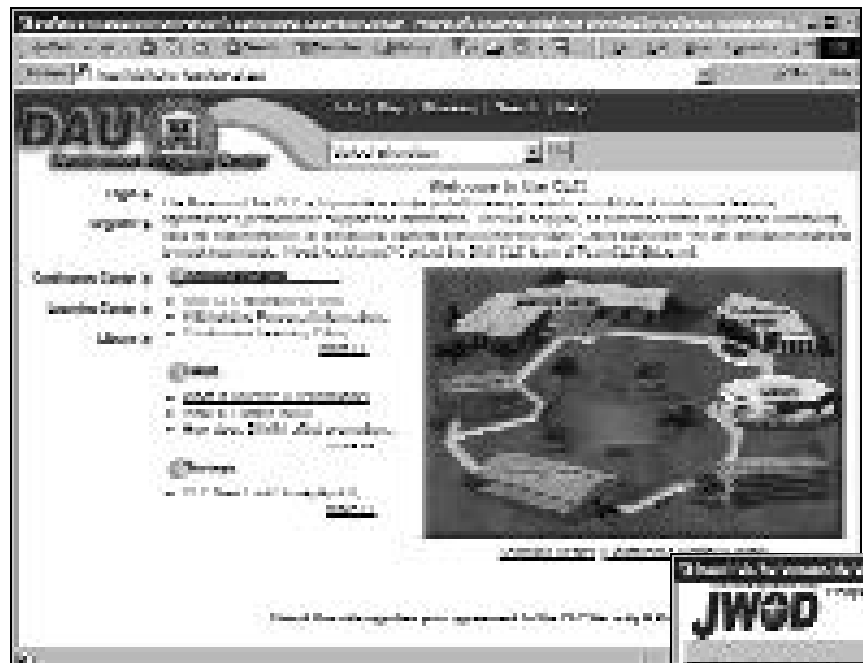
Over the past decade, the Defense Acquisition University (DAU) at Fort Belvoir, Va., has worked diligently to develop ways of harnessing the power of the World Wide Web and deliver interactive course material online to the Acquisition, Technology and Logistics (AT&L) workforce. Recently, DAU completed development of online Continuous Learning (CL) modules on the Javits-Wagner-O'Day (JWOD) Program and Cost as an Independent Variable (CAIV).

The AT&L workforce can now access information on JWOD and CAIV whenever and wherever they wish by logging onto the DAU Continuous Learning Center (CLC). This article will describe how DAU collaborated with a local business and universities to develop these JWOD and CAIV online modules.

DAU Continuous Learning Center

In 2001, DAU recognized that the AT&L workforce needed "just in time" access to current information on policies, procedures, and programs that impact their ability to perform their jobs. In response

Nieves is a Program Manager, Distributed Learning Team, Advanced Technology Solutions, Inc. (ATSI)/DAU Center for e-Learning. Contributing authors are Michael Barclay, a training specialist in the Javits-Wagner-O'Day (JWOD) Program Office; Bob Faulk, Director, Continuous Learning Center/DAU Center for e-Learning, Curricula Development and Support Center (CDSC); Luis Ramirez, Director, Virtual Learning Center, DAU Center for e-Learning; and Sharon Richardson, Director, DAU Center for Business.



to that need, DAU created an online CLC at <http://clc.dau.mil>.

DAU Professor Bob Faulk currently serves as director of the CLC. Since it was formally launched in July 2001, this Web site has provided access to modules that members of the workforce can access wherever and whenever they need specific information on a wide range of topics. To date, the CLC Web site hosts 35 modules. The site also has other capabilities that allow the workforce to collaborate on projects with others who are not physically located at their customary work sites. DAU will continue to leverage the power of this Web site to serve the emerging training and educational needs of the AT&L workforce.

DAU Graduate Internship Program

In 2001, it became increasingly evident that it would be necessary for DAU to find creative new ways to supplement its limited resources to produce new CL modules in a cost-effective manner. DAU also wished to create mutually beneficial partnerships with local organizations.



To meet these e-Learning and organizational goals, DAU created a graduate internship program. The goal would be

to establish relationships with local universities offering graduate programs in education (specifically, in the areas of e-Learning and online instructional technology), with the purpose of designing and developing new online modules in response to the professional development needs of the AT&L workforce.

Graduate students participating in this internship work with DAU faculty, who serve as Subject Matter Experts (SMEs) for the project. The SMEs ensure that the content for the module is complete, current, and accurate. They also work with a mentor at DAU, Dr. Kelly Nieves, who currently serves as Program Manager of the Distributed Learning (DL) Team, through a contract with Advanced Technology Solutions, Inc. (ATSI). She and the DL Team provide support services for DAU's Center for e-Learning. Nieves works with the graduate interns to ensure that the online module is instructionally sound and meets DAU's technical standards.

Each graduate intern's semester project is to work on a project to design and develop an online CL module. The local universities have the opportunity to partner with local organizations to ensure that their graduate programs of study are truly preparing their students with the skills required to succeed in their chosen fields. Graduate students benefit from the opportunity to work on the analysis, design, development, and production of e-Learning projects by putting into practice what they are learning through their program of study. Thus, the graduate internship program is designed to provide a "win-win" situation for all participants.

Graduate students selected to participate can choose to perform various tasks during their internship.

Graduate interns can choose to work on a specific portion of a CL module project. This work can include:

The Analysis and Design phases of the project. Under this option, graduate interns are responsible to deliver a management plan detailing an analysis of the target audience and learning objectives of the module. They also turn in an outline of the lessons to be included

Final versions of both the JWOD and CAIV modules were completed and uploaded onto the DAU Continuous Learning Center Web site in November 2002. Members of the AT&L workforce can now access these online modules whenever and wherever they wish by logging onto the site at <http://clc.dau.mil>.

in the module and a prototype lesson for the online CL module. The finished design will, in all respects, be ready for development and programming. Upon

DISABLED USER ACCESSIBILITY

Throughout the design, development, and evaluation of the on-line JWOD and CAIV modules, both teams paid particular attention to issues impacting how disabled users access these sites. The teams were focused on this area for two important reasons.

- Because DAU is a federal agency, all online material that it develops, procures, and maintains must be fully accessible to disabled users.
- The JWOD and CAIV teams were trained to comply with these requirements as established by Section 508, a 1998 amendment to the Rehabilitation Act of 1973 so that all individuals—both disabled and non-disabled—will have equal opportunities to access information from the online JWOD module.

Accessibility issues were particularly important in the case of this particular project, since JWOD's mission is to support the educational and employment needs of the blind.

acceptance, DAU proposes that 3 credits be granted for the semester. This course may be a project, seminar, or internship format.

The Development and Implementation phases of the project. Under this option, graduate interns develop scripts, graphics, storyboards, and tools (e.g., site map and Frequently Asked Questions) for the entire CL module in HTML/Java Script, adhering to DAU's technical standards for online material. The graduate intern will also be responsible to work with DAU faculty and Center for e-Learning staff to make arrangements to have the newly completed CL module uploaded onto the CLC Web site.

Graduate interns can also choose to complete work on all phases of a CL module project. In this case, they are re-

sponsible for all deliverables associated with the Analysis, Design, Development, and Implementation phases of the projects as described previously.

In the past year, DAU has worked with faculty and students from the graduate schools of education of two universities in the Washington, D.C. area: George Mason University (<http://www.it.gse.gmu.edu/>) and Towson University (<http://wwwnew.towson.edu/coe/departments/istcprgram>). These partnerships have proven successful in the design and development of engaging and informative online CL modules.

Javits-Wagner-O'Day (JWOD) Program

In 2002, DAU began working with the JWOD Program Office. Located in Arlington, Va., the JWOD Program is a public-private partnership administered by the Committee for Purchase From People Who Are Blind or Severely Disabled. An independent federal agency composed of 15 members—all appointed by the President—the Committee has designated two national nonprofit organizations to assist in the operation of the JWOD Program: National Industries for the Blind (NIB) and National Industries for the Severely Handicapped (NISH), serving people with a wide range of disabilities.

Over 14 million Americans live with severe disabilities, and the unemployment rate for that segment of the population is 70 percent. The JWOD Program helps people with disabilities who are unable to obtain or maintain employment on their own.

Michael Barclay, a contributing author for this article and training specialist at JWOD, spent six months assigned to the DAU Virtual Learning Center and worked closely with the faculty and staff on the JWOD module. Though his primary objective was to support DAU's efforts to encourage acquisition professionals to support the JWOD program, he also had time to engage and support other DL efforts. Barclay's work at DAU directly supported JWOD's mission to educate federal customers about their

requirement to purchase products and services made available by nonprofit agencies across the country employing such individuals.

JWOD Module

To expedite dissemination of information on the JWOD program to acquisition professionals throughout the AT&L workforce, Barclay and the Center for e-Learning staff leveraged DAU's CLC Web site. To begin, they set a goal of creating an online JWOD module by August 2002. Given the demanding schedule and lack of available resources, they requested the assistance of a graduate intern for this project.

During the spring 2002 semester, Barclay and Nieves analyzed learning needs, target audience, and overall objectives for the module. By June 2002, they had designed the structure of the module and identified learning strategies. They also began designing the HTML template to be used in the prototype lesson of the module.

During the summer 2002 semester, a graduate intern was identified to work on the JWOD project. Sean Young of Towson University spent July and August working with the JWOD team at DAU. They redesigned the layout and navigation of the template for the module to make it more interactive and user-friendly. Pages of content scripts were turned into storyboards that were evaluated by both DAU and JWOD staff. Graphics were carefully selected to support and enhance the learning experience of the end-user.

The JWOD team also worked together to determine the final design considerations for the layout of the lessons for the module. It was decided that the module would be divided into five lessons:

- **Introduction**—A brief overview of the JWOD program.
- **Purchase Card**—Information that will help purchase card users gain a better understanding of the process of buying products and services from the JWOD program.

- **Contracting**—Information that will provide acquisition professionals with a better understanding of the JWOD contracting process.
- **FAQs**—Frequently Asked Questions.
- **Contact Us**—Contact information for JWOD and technical assistance.

CAIV Module

In spring 2002, DAU also identified the need to create an online CL module on Cost as an Independent Variable (CAIV). Sharon Richardson, Director of the Center for Business at DAU's Curricula Development Support Center (CDSC), realized that the most current information on CAIV was located in various sources; many of the AT&L workforce who needed CAIV resources did not know where to go to get the most current and comprehensive information on DoD 5000 regulations regarding CAIV.

Richardson also realized that AT&L workforce members across the United States needed access to the most current application-based learning. She recommended that DAU design and develop an online CL module on CAIV that could be hosted on DAU's CLC Web site.

Richardson agreed to serve as Subject Matter Expert (SME) on the project. DAU suggested that she work with Nieves in identifying a graduate student to develop this module through the graduate intern program. Lisa Knudson of George Mason University set the ambitious goal that she would complete all tasks related to the design and development of the CAIV module over two months in summer 2002. Essentially, Knudson agreed to do a six-credit internship, which entailed full-time work over July and August 2002 to complete her assignment.

Readily apparent to the CAIV team was the extensive amount of work required to complete the project during summer 2002. Accordingly, the team's first priority was to create a project schedule. Next, they spent the rest of July doing the analysis and design tasks. Richardson and Knudson worked closely together to identify learning ob-

jectives, target audience description, and a layout of the lessons for the module. They also designed the template and prototype lesson for the online module, identifying graphics and images that they wished to include in the lessons as well.

The CAIV team also worked together to determine the final design considerations for layout of the module's five lessons:

- **Objectives**—Objectives of the Module and Instructions on how to use the site; history of CAIV and why it's used.
- **Background**—The evolution and history of CAIV and some basic definitions.
- **Life Cycle**—The Life Cycle Cost description and model.
- **Essentials**—The stakeholders, process, Risk Management, and CAIV tools.
- **Assessment**—Three CAIV Scenarios to evaluate what users have learned.

A major portion of July 2002 was also spent working on preliminary tasks associated with the development of the module. The CAIV team knew that they would have to locate current information on CAIV from a variety of sources. Once they found that data, they had to assimilate it all into a concise text that would present the information to DAU learners in organized and comprehensible lessons.

Given the availability of a vast amount of complex information on CAIV, they knew that writing the text for the module would be challenging. Toward that end, they spent many hours going through material and organizing it into lessons. After the text was developed into basic storyboards—which Richardson and Nieves reviewed and edited—at this point, they were ready to create programmed lessons.

Programming the JWOD and CAIV Modules

The most laborious portion of the development phase of the JWOD and CAIV projects was the development of the programmed lessons in HTML/Java

Script. The long hours and hard work, however, ultimately paid off as the teams began to observe the modules progress from concept to production.

Matt Iannitto, a computer programmer working for ATSI as an undergraduate intern, also joined the module teams. Through Iannitto's efforts, navigation links were programmed to help learners quickly access the information they needed. He also programmed Next and

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Back buttons as well as external links to useful Web sites. Graphics, pictures, and other images were chosen and, at times, developed originally by the JWOD team and DAU staff.

To help users find their way around the modules, three color-coded navigation

bars were developed. A blue navigation bar at the top displays active links to the start of each lesson in the module. A yellow navigation bar at the top displays active links to the start of each topic within the lessons. Links from a red navigation bar at the top of the screen direct users to other supporting online material for the modules, with information such as Assessment Items, Resources, Links, as well as Regulations and Policies.

The CAIV team also developed additional supporting online material for their module (also accessed via active links from the red navigation bar at the top of the screen). Such material included a site map and Frequently Asked Questions. Like the JWOD team, they also spent many hours carefully choosing graphics and images to enhance the learning experience of the end-user.

By the middle of August, a draft of the programmed lessons for all lessons and supplemental material for the JWOD and CAIV modules was complete. Barclay and the JWOD staff carefully reviewed the content in all of the programmed lessons. Richardson and other faculty from the Capital and Northeast Region campus at Fort Belvoir reviewed the CAIV module. Nieves also reviewed the draft of both modules from an instructional and technical point of view. Faulk also closely monitored the progress of both projects.

By the end of August 2002, all reviewers for alpha versions of the JWOD and CAIV modules were satisfied that the modules were educationally sound and met all of the learning objectives that the developers had set out to accomplish.

The JWOD and CAIV teams also requested additional reviewers look at the beta versions of the modules and provide feedback to ensure that the modules would meet the learning needs of the AT&L workforce. The beta tests were conducted in September 2002.

Since both graduate interns had completed more than the required hours for

their projects and actually had returned to their teaching jobs and new graduate courses, they were not available for more work on the modules. Therefore, Nieves and the ATSI staff worked with Barclay and Richardson to complete the final editing and revisions required on the modules during September and October 2002.

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A Unique Collaboration

DAU fully understands that creating engaging and effective online instructional material requires bringing together individuals with an array of perspectives and talents. Once the Center for e-Learning at DAU decided to create online modules for the JWOD Program and CAIV, it leveraged the skills and expertise of its faculty and contractor support staff. The Center also established and fostered relationships with a business and two universities in the local Washington, D.C. area. These partnerships resulted in a unique collaboration of strong teams who worked together to accomplish development of the JWOD and CAIV modules on time, while making maximum use of all available resources.

Because of their collaborative efforts, acquisition professionals and individuals with disabilities now have access to complete information on the products and services offered by JWOD, as well as information on JWOD's dedicated work in support of individuals with disabilities. One-stop shopping is also now a reality for those in the AT&L workforce who need resources with the most current and comprehensive information on CAIV.

Editor's Note: See p. 61 for information on DAU's newest module, Reducing Total Ownership Costs. To learn more about the DAU Continuous Learning Center, visit the CLC Web site at <http://clc.dau.mil>.

IN MEMORIAM

Joseph A. "Joe" Drelicharz



The Defense Acquisition University has received word of the death of Joseph A. "Joe" Drelicharz on Dec. 18, 2002, due to an apparent heart attack.

Joe joined the Defense Systems Management College (DSMC) in November 1982 as a Professor of Engineering Management, School of Program Management Division, at Fort Belvoir, Va. Prior to joining DSMC, Joe worked for 15 years as a senior staff member of the Plans and Analysis Office, Technical Director, Naval Civil Engineering Laboratory, Port Hueneme, Calif.

In January 1999, Joe retired from federal civilian service and entered private industry. At the time of his death, he was employed by Cherokee Systems, in Crystal City, Va.

Joe was a graduate of DSMC's Program Management Course (PMC 87-1). He is survived by his wife, Carol, of Springfield, Va.